03050208-040

(Ashepoo River)

General Description

Watershed 03050208-040 is located in Colleton County and consists primarily of the ***Ashepoo River*** and its tributaries. The watershed occupies 82,666 acres of the Coastal Zone region of South Carolina. The predominant soil types consist of an association of the Bohicket-Pungo-Bladen-Wahee series. The erodibility of the soil (K) averages 0.10, and the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 37.0% forested land, 24.2% nonforested wetland, 17.8% forested wetland, 12.3% water, 6.3% agricultural land, 2.2% barren land, and 0.2% urban land.

The Ashepoo River is created by the confluence of Great Swamp and Bluehouse Swamp in 03050208-020. Downstream of the confluence, the Ashepoo River accepts drainage from Johno Creek, the Horseshoe Creek Watershed, Deer Creek (Snuggedy Swamp), Hole in the Wall, Rock Creek, and Crooked Creek. Further downstream, Mosquito Creek (Musselboro Creek, Bull Cut) enters the river followed by the Ashepoo-Coosaw Cut (AIWW), the Fenwick Cut (to Edisto River), and Bank Creek. Rock Creek, Fish Creek (Jefford Creek, Pine Island Creek, Otter Creek), and Two Sisters Creek (Long Ashepoo Creek) drain into the both the Ashepoo River and St. Helena Sound. There are a total of 40.4 stream miles, 92.7 acres of lake waters, and 4,664.5 estuarine acres in this watershed. The Ashepoo River and its tributaries are classified FW above the saltwater intrusion and SFH below the intrusion.

Surface Water Quality

Station #	Type	Class	Description
CSTL-068	P	FW/SFH	ASHEPOO RIVER AT SC 303, 10MI SSW OF WALTERBORO
CSTL-069	S	SFH	ASHEPOO RIVER AT US 17, 3.4MI ESE OF GREEN POND
MD-251	W	SFH	ASHEPOO RIVER AT S-15-26

Ashepoo River - There are three monitoring sites along the Ashepoo River. The upstream site ***(CSTL-068)*** is located in an area that is transitional between fresh and salt waters. Aquatic life uses are fully supported **under both freshwater and saltwater criteria**. Although dissolved oxygen and pH excursions were noted, they were typical of values seen in such transitional areas and are considered natural, not standards violations. There is a significant increasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Aquatic life uses are fully supported at the midstream site ***(CSTL-069)***. This is a tidally influenced system with marsh drainage, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although pH and dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations. There is a significant decreasing trend in dissolved oxygen concentration. A significant decreasing trend in five-day

biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are fully supported.

At the downstream site ***(MD-251)***, aquatic life uses are not supported due to turbidity excursions. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although pH and dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations. Recreational uses are fully supported.

In an effort to reduce water hyacinth populations throughout the water system, aquatic herbicides were applied to the river by SCDNR from 1997-1999, and planned for 2003. An ongoing strategy to prevent further introduction of problem species is carried out through public education, surveys of the waterbody, and enforcement of existing regulations.

A fish consumption advisory has been issued by the Department for mercury and includes the Ashepoo River within this watershed (see advisory p.57).

Shellfish Monitoring Stations

Station #	Description
13-13	MOUTH OF FISH CREEK AT OTTER ISLAND AND ATLANTIC OCEAN
13-15	HEADWATERS OF PINE ISLAND CREEK AT THE FORK
13-26	4,000 FT FROM CONFL. OF FISH CK & ATLANTIC OCEAN; AT FIRT "T" IN FISH CK
14-19	ASHEPOO RIVER POG
14-20	CUT BETWEEN SOUTH EDISTO RIVER AND THE ASHEPOO RIVER
14-21	CONFLUENCE OF MOSQUITO CREEK AND THE ASHEPOO RIVER

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-086	GB	SURFICIAL SANDS	BENNETTS POINT

All water samples collected from ambient monitoring well ***AMB-086*** met standards for Class GB groundwater.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM *FACILITY NAME* *PERMITTED FLOW @ PIPE (MGD)*	*NPDES#* *TYPE* *COMMENT*
ASHEPOO RIVER TRIBUTARY JAMES W. WILLIAMS FACILITY PIPE #: 001 FLOW: 0.004	SC0038989 MINOR DOMESTIC
ASHEPOO RIVER BOLEN POINT SD/CARGILSELL & CO. PIPE #: 001 FLOW: 0.010	SC0037788 MINOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME *FACILITY TYPE*	*PERMIT #* *STATUS*
COLLETON COUNTY C/C LANDFILL	151001-1201 ACTIVE
COLLETON COUNTY C/C LANDFILL	CWP-045 INACTIVE

Mining Activities

MINING COMPANY *MINE NAME*	*PERMIT #* *MINERAL*
HB LIMEHOUSE AIRY HALL PEAT MINE	1152-29 PEAT

Growth Potential

There is a low potential for growth in this watershed.